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EXAMINER				
USTARIS, JOSEPH G				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/902,707

Applicant(s)

NATHAN ET AL.

Examiner

JOSEPH G. USTARIS

Art Unit

2424

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 6-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-9 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claim 6-9 and 11 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. (US 5355302) in view of Frank et al. (US 5341 350), Ludwig (US 5689641), Servi (US005278904A), Brown (US005445295A), and Hendricks et al. (US 6408437).

Regarding claim 6, Martin et al. (Martin) discloses a method of operating a jukebox system (See Fig. 1) including:

providing a jukebox device including a microprocessor (121A), a memory (93) that stores songs that may be played on the jukebox device in response to requests by a user (See col. 5 lines 8-10 and 27 and col. 7 lines 56-64), a display for displaying images (See col. 5 lines 8-25 and 42-59 and col. 6 lines 59-68), an audio arrangement (127 and 129) providing audio (See col. 5 lines 56-59), a communication system (modem 19) for enabling the jukebox device to communicate with a song distribution network (network 15) (See Fig. 1), and a operating system that enables operation of the

microprocessor, the display, the audio arrangement and the communication system, and further wherein said jukebox device includes operating software that controls operation of said jukebox (See col. 5 lines 26-59);

providing a server system (11) remote from said jukebox device that can be accessed by said jukebox device through said distribution network (See col. 3 lines 26-28);

downloading songs from the server system to the jukebox device and storing the downloaded songs on the jukebox device (See col. 6 lines 19-58);

displaying on the display images of album covers that correspond to songs that are stored on the jukebox device (See col. 4 lines 51-53 and col. 5 lines 8-25);

collecting money through the jukebox device from patrons in the public establishment in exchange for playing selected songs on the jukebox device (See col. 7 lines 18-55);

uploading royalty information from the jukebox device to the server system for use in accounting for music rights associated with the selected songs (See col. 3 lines 7-12);

However, Martin does not disclose a jukebox system for use in a public establishment; a touch screen display wherein the patrons select desired songs by interacting with the jukebox device through the touchscreen display; a multitasking operating system that enables simultaneous operation; said jukebox includes security operating software; a controller system; providing a system management function that enables an authorized manager of the jukebox device to locally access and selectively

adjust adjustable operation settings for the jukebox device through use of the touchscreen display, a plurality of the adjustable settings being adjustable over a range predetermined by the authorized manager; registering said jukebox device for operation through communication between the security operating software of the jukebox device and the controller system, the security operating software (1) authorizing the jukebox device to operate when the authorized manager has processed a correct registration, or (2) causing the jukebox device to at least temporarily stop working if cheating has been detected by the security operating software or if the network cannot be accessed; sending update data from said server system to said jukebox device which is used by said jukebox device to remotely update said operating software on said jukebox device; modifying said jukebox device, upon receipt by said jukebox device of said update data, such that said jukebox device will operate in accordance with new operating software updated by use of said update data received from said server system over said distribution network.

Frank teaches a coin operated jukebox device using data communication network in which Frank discloses a touchscreen display (Frank 4:10-28) wherein the patrons select desired songs by interacting with the jukebox through the touchscreen display (See Martin 7:18-55). Furthermore, Frank discloses that jukeboxes are used in public establishments (restaurants) (See Frank 1:9-11). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin jukebox, display, and selections keys with the Frank touch-screen display for the purpose providing a more intuitive interface for

interacting with the jukebox system and to reduce the number of system components, by not requiring the inclusion of separate selection keys and using the jukebox in a public establishment for the purpose of reaching a wider range of customers.

Ludwig teaches a multitasking operating system that enables simultaneous operation (Ludwig 4:55-58; 6:15-22; and 18:44-52). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin operating system with the Ludwig multitasking operating system in order to manage multiple tasks thereby maximizing the processing power of the microprocessor.

Servi discloses a client-server system. Servi discloses that the device (e.g. requester node) and controller system (e.g. server) includes security operating software (e.g. logon and identification through password verification software) (See Fig. 1; col. 2 lines 40-50). Servi discloses registering said jukebox device for operation through communication between the security operating software of the jukebox device and the controller system (See Servi col. 2 lines 51-63, obtaining a binary bits password), the security operating software (1) authorizing the jukebox device to operate when the authorized manager (e.g. user) has processed a correct registration (e.g. has provided the correct id code and password) (the device uses the password at each startup of the communications link in order to gain access, See col. 2 line 51 - col. 3 line 24), or (2) causing the jukebox device to at least temporarily stop working (e.g. access denied to protected resource) if cheating has been detected by the security operating software (e.g. if password or id code is not valid) (See Fig. 1) or if the network cannot be

accessed (if the network cannot be accessed then the protected resource is not available thus leaving the device not usable with respect to the protected resource). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the jukebox system disclosed by Martin to include security operating software, a controller system, and register said jukebox device for operation through communication between the security operating software of the jukebox device and the controller system, the security operating software (1) authorizing the jukebox device to operate when the authorized manager has processed a correct registration, or (2) causing the jukebox device to at least temporarily stop working if cheating has been detected by the security operating software or if the network cannot be accessed, as taught by Servi, in order to provide a more secure system by verifying the clients before granting access to protected services (See col. 1 lines 13-34).

Brown teaches a vending machine for recorded goods. Brown discloses providing a system management function that enables an authorized manager of the jukebox device to locally access and selectively adjust adjustable operation settings for the jukebox device (See Fig. 2, 16; col. 5 lines 22-57), a plurality of the adjustable settings being adjustable over a range predetermined by the authorized manger (See Brown col. 5 line 22 – col. 6 line 2 and col. 8 lines 38-47; the owner can set price ranges/discounts and access to headphone volume control, wherein a plurality of the adjustable settings (price/adjustments and headphone volume) being adjustable over a range predetermined by the authorized manager (e.g. user purchasing multiple products at once changes the prices via a discount set by owner and user has access to the full

range of the headphone volume control as set by the owner). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin route men configuration of a computer jukebox (See Martin 8:8-30) in view of Frank's touch screen in combination with Ludwig and Servi with the Brown system management function via control means in order to tailor the system to the location and circumstances.

Note, the Martin discloses jukebox software (Martin 5:26-33) and updating songs on the jukebox (Martin 6:8-58). Hendricks discloses a reprogrammable terminal. Hendricks discloses sending update data from said server system to said device which is used by said device to remotely update said operating software on said device (Hendricks 28:14-20; the transmitting of update data from the network controller to the device for remote reprogramming). Hendricks also discloses modifying said device, upon receipt by said device of said update data, such that said device will operate in accordance with new operating software updated by use of said update data received from said server system over said distribution network (Hendricks 28:40-45). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin's jukebox software and central management system in view of Frank, Ludwig, Servi, and Brown with the Hendricks remote updating of a device from a server for the purpose of providing a convenient way of upgrading functionality of the jukebox without requiring service personnel to visit each physical location and manually upgrade the software.



Regarding claim 11, Servi discloses that the device registered with the controller system (See Fig. 1, server) acquires of an approval signal in the form of a registration number (See Servi col. 2 lines 51-63, binary bits password) that the device checks upon each startup (the device uses the password at each startup of the communications link in order to gain access, See col. 2 line 51 - col. 3 line 24), wherein if a correct registration number is found (if correct password is found), the jukebox device is then rendered operation (access is granted) (See Fig. 1; col. 2 line 51 - col. 3 line 24).

4. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. (US 5355302) in view of Frank et al. (US 5341 350), Ludwig (US 5689641), Servi (US005278904A), Brown (US005445295A), and Hendricks et al. (US 6408437) as applied to claim 6 above, and further in view of Bacon et al. (US 5440632), McGill, III et al. (US005469573A), Beaverton (US 5210854), and Nilsson et al. (US 5,410,703).

Regarding claim 7, Martin and Hendricks discloses the updated of jukebox software as discussed in the rejection of claim 6. However, Martin in view of Frank, Ludwig, Servi, Brown, and Hendricks does not disclose upon receipt of said update data, verifying by said jukebox device if a version number of current software is outdated, and, if said version number is outdated, performing a back-up of the current operating software, modifying a system startup file for startup with the back-up of the current software, beginning execution of a new version of said software received from said server system, verifying proper operation of said new version of said software, and,

if said new version properly operates, reinitializing the system startup file for startup with the new version.

Bacon discloses a reprogrammable subscriber terminal. Bacon discloses upon receipt of said update data, verifying by said device if a version number of current software is outdated, and, if said version number is outdated (Bacon 15:27-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin in view of Frank, Ludwig, Servi, Brown, and Hendricks to have the system to verify the version of the current software with the new version of the new software, as taught by Bacon so to determine which jukebox device needs to be update. Moreover, to ensure the entire jukeboxes operate with the same software version.

Note that Martin in view of Frank, Ludwig, Servi, Brown, Hendricks, and Bacon combination teaches comparing version information as discussed above and performing a function if the version number is outdated. Further note, the Hendricks discloses an embodiment wherein the current program version remains in FLASH ROM while the new program version is installed (Hendricks 28:1-13) and "[i]f a single FLASH ROM does not have enough memory capacity to store both the current program version n 1110 and a new program version, the new program version 1106 can be loaded into a second FLASH ROM" (Hendricks 28:36-39). Also note, Martin discloses a ROM for the software and RAM for a scratch pad (Martin 5:26-32).

McGill, III et al. (McGill) discloses a system for backing up operating systems. McGill discloses performing a back-up of the current operating software (See col. 5 lines

32-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Martin in view of Frank, Ludwig, Servi, Brown, and Hendricks to perform a back-up of the current operating software, as taught by McGill, for the purpose of keeping the original working software available for roll-back in the event the new software fails to install or operate properly (See Nilsson col. 12 lines 29-37).

Beaverton discloses a system for updating program stored in EEPROM by storing new version into new location and maintaining a transfer vector to contain the starting address of the old version or new version (Beaverton 3:10-25). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin in view of Frank, Ludwig, Servi, Brown, Hendricks, and Bacon combination with the Beaverton's startup file initially pointing at the current software and modifying the startup file to point to the new version of software upon completed loading for the purpose of providing a method for recovering from an installation error of the new version of software.

The claimed "modifying a system startup file for startup with the back-up of the current software" is met by the Martin in view of Frank, Ludwig, Servi, Brown, Hendricks, Bacon, and Beaverton combination, as discussed above, wherein in order to point to the current program, it is inherent that the start up file be modified to point to the back-up of the current software. Note, the Martin in view of Frank, Ludwig, Servi, Brown, Hendricks, Bacon, and Beaverton combination discloses "and, if said new version

properly [loads], reinitializing the system start up file for startup with the new version" (Beaverton 3:20-25).

Nilsson discloses executing the software and if there is a problem rollback to the old version of software (Nilsson 11:15-68; 12:12-37). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin in view of Frank, Ludwig, Servi, Brown, Hendricks, Bacon, and Beaverton combination teaching modifying a startup file if the new version is properly loaded with the Nilsson's execution error for the purpose of ensuring that the software executes properly prior to the transfer of control from the old version of software to the new version of software.

The claimed "beginning execution of a new version of said software and, if said new version properly operates, reinitializing the system start up file for startup with the new version" is met by the Martin in view of Frank, Ludwig, Servi, Brown, Hendricks, Bacon, Beaverton, and Nilsson combination as discussed above.

As to claim 8, the claimed "further including, if said verification of said new version indicates an error, reinitializing said current version of said software" is met by that discussed in the rejection of claim 7 (Nilsson). The claimed "and sending an error message to said server system" is met by the transmission of a message to the server upon failure of the installation (Hendricks 27:65-67).

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. (US 5355302) in view of Frank et al. (US 5341 350), Ludwig (US 5689641), Servi

(US005278904A), Brown (US005445295A), and Hendricks et al. (US 6408437) as applied to claim 6 above, and further in view of Levinson (US005404505A).

Regarding claim 9, Martin in view of Frank, Ludwig, Servi, Brown, and Hendricks does not disclose encoding songs with a code number resident in said jukebox device before downloading song from the server system to the jukebox device, the songs being encoded by the server system.

Levinson discloses a system that distributes data. Levinson discloses encoding data with a code number (e.g. decoding keys) resident in said device (e.g. decoding keys are provided to the subscribers device) before downloading data from the server system to the device, the data being encoded by the server system (See Fig. 1; col. 7 lines 45-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Martin in view of Frank, Servi, Brown, and Hendricks to encode songs with a code number resident in said jukebox device before downloading song from the server system to the jukebox device, the songs being encoded by the server system, as taught by Levinson, in order to prevent access by unauthorized subscribers to protected data (See col. 7 lines 66-67).

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH G. USTARIS whose telephone number is (571)272-7383. The examiner can normally be reached on M-F 7:30-5 PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph G Ustaris/  
Primary Examiner, Art Unit 2424